

RB-SW Rumbler Actuation Switch Installation Instructions

25500562 Rev. A0 1019

Safety Message to Installers of Federal Signal Siren Speakers

▲ WARNING

People's lives depend on your proper installation and servicing of Federal Signal products. It is important to read and follow all instructions shipped with this product and the original product. Listed below are some other important safety instructions and precautions you should follow.

Before Installation or Service

Qualifications

To properly install this item, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and service of safety warning equipment. Always refer to the vehicle's service manuals when installing equipment on a vehicle.

Sound Hazards

- Your hearing and the hearing of others, in or near your emergency vehicle, could be damaged by loud sounds. This can occur from short exposures to very loud sounds, or from longer exposures to moderately loud sounds. For hearing conservation guidance, refer to federal, state, or local recommendations. OSHA Standard 1910.95 offers guidance on "Permissible Noise Exposure."
- All effective sirens and horns produce loud sounds (120 dB) that may cause permanent hearing loss. Always minimize your exposure to the sound of the siren or horn and wear hearing protection. Do not sound the siren or horn indoors or in enclosed areas where you and others will be exposed to the sound.
- · Federal Signal siren amplifiers and speakers are designed to work together as a system. Combining a siren and speaker from different manufacturers may reduce the warning effectiveness of the siren system and may damage the components. You should verify or test your combination to make sure the system works together properly and meets federal, state and local standards or guidelines.

During Installation

- · DO NOT get metal shavings inside the product. Metal shavings can cause the system to fail. If drilling must be done near the unit, place an ESD-approved cover over the unit to prevent metal shavings from entering the unit. Inspect the unit after mounting to be sure there are no shavings present in or near the unit.
- To avoid a battery explosion, always disconnect the negative battery cable first and reconnect it last. Avoid causing a spark when connecting near or to the battery. The gases produced by a battery can cause a battery explosion that could result in vehicle damage and serious injury.
- DO NOT connect this system to the vehicle battery until ALL other electrical connections are made, mounting of all components is complete, and you have verified that no shorts exist. If wiring is shorted to the vehicle frame, high current conductors can cause hazardous sparks resulting in electrical fires or flying molten metal.
- In order for the electronic siren to function properly, the ground connection must be made to the NEGATIVE battery terminal.
- · If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.

Installing the RB-SW Rumbler Actuation Switch

- Never attempt to install aftermarket equipment, which connects to the vehicle wiring, without
 reviewing a vehicle wiring diagram, which is available from the vehicle manufacturer. Ensure that your
 installation will not affect vehicle operation and safety functions or circuits. Always check the vehicle
 for proper operation after installation.
- DO NOT install equipment or route wiring or cord in the deployment path of an airbag.
- Locate the switch so that it can be operated safely.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.

After Installation

- After installation, test the siren system and light system to ensure that they are operating properly.
- Test all vehicle functions, including horn operation, vehicle safety functions, and vehicle light systems, to ensure proper operation. Ensure that installation has not affected vehicle operation or changed any vehicle safety function or circuit.
- After testing is complete, provide a copy of these instructions to the instructional staff and all operating personnel.
- File these instructions in a safe place and refer to them when maintaining or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Product Overview

The Federal Signal RB-SW Rumbler Actuation Switch is a panel- or dash-mounted momentary switch intended to activate and cancel a Federal Signal Rumbler Low Frequency Siren.

Unpacking the Product

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of damage. Failure to identify damage before installation could lead to rejection of any claim. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 1 are included in the package. If you are missing any parts, contact Federal Signal Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT).

Table 1 Kit contents

Qty	Description	Part Number
1	RB-SW Rumbler Actuation Switch	19901972A

Installing the Switch

To install the switch:

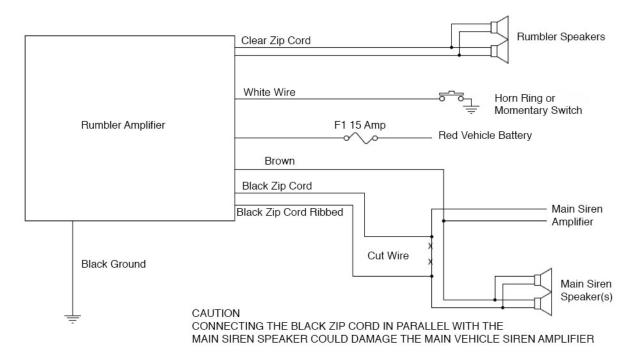
1. Cut a hole in the vehicle's dashboard or panel to accommodate the switch. See Figure 1 for the proper dimensions.

1.970[50.04] 1.020[25.91] .867[22.02] Top View TEST OPENING IN ACTUAL MATERIAL 1.734[44.04] .250 X .032 [6.35] [.81] .855[21.72] POS 3 POS 2 POS 1 Side View Switch Mounting .400[10.16] Hole 皿 1.450[36.83] Side View .280[7.11] Bottom View Measurements in inches [followed by millimeters]

Figure 1 Specifications

The Rumbler amplifier is typically wired as shown in Figure 2.

Figure 2 Typical Rumbler Wiring Diagram



The RB-SW Rumbler Actuation switch is a double pole, double throw, momentary actuated, panel-mounted switch. Pressing the switch up activates the siren by momentarily applying the ground to the white activation wire. When you use this switch, the horn ring or momentary switch shown in Figure 2 is replaced with the actuation switch as shown in Figure 3, and the red wire attaches to the actuation switch before it reaches the fuse.

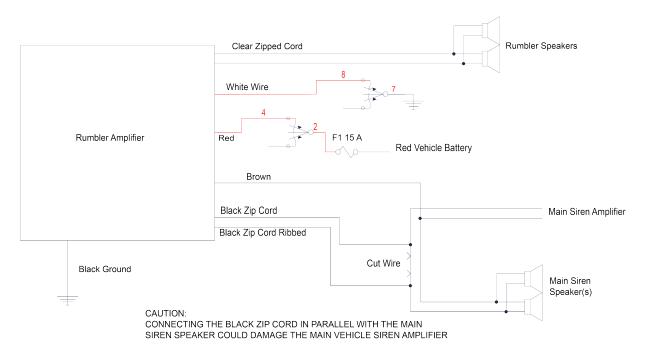


Figure 3 Rumbler Actuation Switch Diagram

Table 2 Diagram Parts for Figure 3

Number	Item	
1	No Connection	
2	Pole	
4	Red Wire	
5	No Connection	
7	7 Switch Pole	
8	8 Normally Open Contact	

- 2. Connect the Switch Pole (7) to the to Battery Ground.
- 3. Connect the Normally Open Contact (8) to the White Activation Wire of the Rumbler Amplifier.
- **4.** From a fuse connection from the vehicle battery, route the power to the Pole (2) of the opposite switch and connect the red wire (4). To cancel the Rumbler, press the switch to momentarily disconnect power from it.
- **5.** Take 0.250 fully insulated terminals (user-supplied), crimp them onto the wires, and attach the terminals to the switch.

NOTE: You MUST fully press the Rocker Switch for ½ second to ACTIVATE or CANCEL the Rumbler Siren.

Installing the RB-SW Rumbler Actuation Switch

Switch Functions

This sections shows switch diagrams and tables.

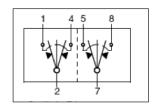
Table 3 shows the position the switch moves to in Figure 4 when activated.

Table 3 Switch Function

Pos 1	Pos 2	Pos 3
(ON)	ON	(ON)
2 to 4	2 to 4	1 to 2
7 to 8	5 to 7	5 to 7

The rating is 15 A, 12 V

Figure 4 Switch Diagram



Getting Technical Support

For technical support, please contact:

Federal Signal Corporation

Service Department Phone: 1-800-433-9132

Email: empserviceinfo@fedsig.com

Getting Repair Service

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain a RMA from a local Distributor or Manufacturer's Representative. Provide a brief explanation of the service requested, or the nature of the malfunction.

Address all communications and shipments to the following:

Federal Signal Corporation Service Department 2645 Federal Signal Dr. University Park, IL 60484-3167

Limited Warranty

This product is subject to and covered by a limited warranty, a copy of which can be found at www.fedsig.com/SSG-Warranty. A copy of this limited warranty can also be obtained by written request to Federal Signal Corporation, 2645 Federal Signal Drive, University Park, IL 60484, email to info@fedsig.com or call +1 708-534-3400.

This limited warranty is in lieu of all other warranties, express or implied, contractual or statutory, including, but not limited to the warranty of merchantability, warranty of fitness for a particular purpose and any warranty against failure of its essential purpose.



2645 Federal Signal Drive University Park, Illinois 60484-3167

www.fedsig.com

Customer Support

Police/Fire-EMS:
Work Truck:
Technical Support: 800-264-3578 • +1 708 534-3400 800-824-0254 • +1 708 534-3400 800-433-9132 • +1 708 534-3400

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